SESAR		Achieved						Е	CAC	
ATC02.2		Implen	nent ground	l based saf	ety nets - S	hort Term (operations		rt (STCA) - I	evel 2 for e	n-route
REG	ASP	MIL	APO	USE	INT	IND	NM	MET	AIS	USP

Subject matter and scope

Implement and make operational use of the Short Term Conflict Alert (STCA) ground based safety net for en-route operations in line with the EUROCONTROL Specification for STCA and the related guidance material.

An explanation of the difference between Level 1 and 2 is described below.

Before starting first operations, air traffic controllers must receive training, aimed at creating an appropriate level of trust in the concerned safety net. The time-criticality of alerts and the need for immediate attention or action must be well understood, but also the situations in which safety nets are less effective.

Safety nets performance must be monitored and regularly analysed, not only to improve the safety nets but also to identify other safety improvement opportunities. For example, "hot spots" could be identified and removed by making changes to airspace structure or procedures.

NOTE FOR MILITARY AUTHORITIES: It is the responsibility of each Military Authority to review this Objective IN ITS ENTIRETY and address each of the SLoAs that the Military Authority considers RELEVANT for itself. This has to be done on top and above of the review of "MIL" SLoAs which identify actions EXCLUSIVE to MIL Authorities.

Military ATC authorities are invited to consider implementation of STCA level 2 when providing ATS surveillance services to GAT.

Applicability Area(s) & Timescale(s)

Applicability Area	All ECAC+ States			
Timescales:		From:	Ву:	Applicable to:
Initial operational capability	01/01/2008		Applicability Area	
Full operational capability		31/01/2013	Applicability Area	

References

European ATM Master Plan

OI step -	[CM-0801]-Ground Based Safety Nets (TMA, En-Route)								
	Enablers -	CTE-S01	CTE-S01a ATC02.8, ATC12.1	ER APP ATC 133	PRO-059 ATC02.8	PRO-219 ATC02.8			

	M/VV7 004	Covered by SLoA(s) in	WXYZ-002	Covered by SLoA(s) in another objective	WXYZ-	Not covered in the
Legend:	WXYZ-001	this objective	ZZZ	Objective covering the enabler	003	Implementation Plan

Applicable legislation

Essential Operational Changes

- none -

-none-

SESAR Solution

ICAO GANP - ASBUs

SNET-B0/1 Short Term Conflict Alert (STCA)

Deployment Programme

- none -

European Plan for Aviation Safety

ATC02.2 Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2 for enroute operations

- none -

Operating Environments

En-Route
Terminal Airspace

Stakeholder Lines of Action (SLoAs)

SloA ref.	Title	From	Ву
ATC02.2-REG01	Conduct safety oversight of the changes	DELETED	
ATC02.2-ASP01	Implement STCA function for en-route operations	01/01/2008	31/01/2013
ATC02.2-ASP02	Align ATCO training with the use of STCA ground-based safety tools	01/01/2008	31/01/2013
ATC02.2-ASP03	Develop safety assessment for the changes	01/01/2012	31/01/2013

Description of finalised and deleted SLoAs is available on the eATM Portal @ https://www.eatmportal.eu/working/depl/essip_objectives

Expected Performance Benefits

Safety: The systematic presentation of potential infringements of separation minima to controllers ahead of their occurrence,

as provided by STCA, is a major safety assurance tool.

Capacity: N/A

Operational Efficiency:

Cost Efficiency:

Standardisation of STCA enables cost-effective use of resources and is in particular a critical success factor for smaller

N/A

Environment: N/A

Security: N/A

Detailed SLoA Descriptions

	Detailed SLOA Descriptions						
ATC02.2-ASP01	Implement STCA function for en-route operations	From: 01/01/2008	By: 31/01/2013				
Action by:	ANS Providers						
Description & purpose:	Implement STCA systems and associated procedures in line with EUROCONTROL Specification and related guidance material in en-route airspace.						
Supporting material(s):	EUROCONTROL - Safety Nets - A guide for ensuring effectiveness - Au	gust 2017					
	Url: https://www.eurocontrol.int/sites/default/files/publication/files/safety-	<u>-nets-guide-august-2017</u>	<u>'.pdf</u>				
	EUROCONTROL - GUID-159 - EUROCONTROL Guidelines for Short Term Conflict Alert - Part I to III - Edition 1.0 / 01/2017						
	Url: https://www.eurocontrol.int/publication/eurocontrol-guidelines-short-term-conflict-alert-stca						
	EUROCONTROL - SPEC-108 - EUROCONTROL Specification for Short Term Conflict Alert - Edition 1.0 / 11/2007						
	Url: https://www.eurocontrol.int/publication/eurocontrol-specifications-sh	ort-term-conflict-alert-st	<u>ca</u>				
ATM Master Plan relationship:	[ER APP ATC 133]-Upgrade Ground Safety Nets to provide Area Penetration Warning (APW), Minimum Safe Altitude Warning (MSAW) and Approach Path Monitoring to Controller Workstations.						
Finalisation criteria:	1 - STCA function is implemented, documented and in operational use.						
	Align ATCO training with the use of STCA ground-based safety	From:	By:				
ATC02.2-ASP02	tools	01/01/2008	31/01/2013				
Action by:	ANS Providers						
Description & purpose:	Train operational staff in the use of STCA in line with guidelines based of and related guidance material.	on the EUROCONTROL	Specification for STCA				
	The tasks to be done are as follows:						
	- Develop a training package (material);						
	- Update the training plans; - Determine staff population to be trained;						
	- Apply the training plans.						

ATC02.2	Implement ground based safety nets - Short Term Conflict Alert (STCA) - level 2 for enroute operations						
Supporting material(s):	EUROCONTROL - Safety Nets - A guide for ensuring effectiveness - August 2017						
	Url: https://www.eurocontrol.int/sites/default/files/publication/files/safet	y-nets-guide-august-	<u>2017.pdf</u>				
	EUROCONTROL - SPEC-108 - EUROCONTROL Specification for Sh	ort Term Conflict Aler	t - Edition 1.0 / 11/2007				
	Url: https://www.eurocontrol.int/publication/eurocontrol-specifications-	short-term-conflict-ale	ert-stca				
Finalisation criteria:	1 - The training plans have been updated and a training package has been updated and a	een developed by th	e ANSP.				
		From:	Ву:				
ATC02.2-ASP03	Develop safety assessment for the changes	01/01/2012	31/01/2013				
Action by:	ANS Providers						
Description & purpose:	Develop safety assessment of the changes, notably ATC systems and procedures that will implement Short Term Conflict Alert (STCA) - level 2 functionality and associated procedures.						
	The tasks to be done are as follows:						
	- Conduct hazard identification, risk assessment in order to define safety objectives and safety requirements mitigating						
	the risks; - Develop safety assessment;						
	- Deliver a safety assessment report to the NSA, if new standards are applicable or if the severity class of identified risks						
	is 1 or 2.						
	This safety assessment shall be based on fully validated/recognised method.						
Supporting material(s):	EC - COMMISSION IMPLEMENTING REGULATION (EU) 2017/373 - IMPLEMENTING REGULATION (EU) 2017/373 of 1 March 2017 layin traffic management/air navigation services and other air traffic manage repealing Regulation (EC) No 482/2008, Implementing Regulations (E 2016/1377 and amending Regulation (EU) No 677/2011 03/2017	(OJ L 62, 8.03.2017, g down common requ ment network function	uirements for providers of air ons and their oversight,				
	Url: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:	32017R0373&from=l	<u>EN</u>				
	EUROCONTROL - Safety Nets - A guide for ensuring effectiveness - A	August 2017					
	Url: https://www.eurocontrol.int/sites/default/files/publication/files/safet	y-nets-guide-august-	2017.pdf				
	EUROCONTROL - EAM 4 - ESARR 4 - Risk Assessment and Mitigation	on in ATM - Edition 1.	0 / 04/2001				
	Url: https://www.eurocontrol.int/publication/esarr-4-risk-assessment-ar	nd-mitigation-atm					
	EUROCONTROL - Air Navigation Systems Safety Assessment Method	dology (SAM) - Versio	on 2.1 / 11/2006				
	Url: https://www.eurocontrol.int/tool/safety-assessment-methodology						
Finalisation criteria: 1 - The Safety assessment report including safety arguments for the changes has been delivered to the NSA a notification of acceptance was received.			vered to the NSA and a				